UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

August 19, 2011

Mr. Jim Sullivan
BRAC Environmental Coordinator
BRAC Program Management Office – West
1455 Frazee Road, Suite 900
Via email only: james.b.sullivan2@navy.mil

RE: U.S. EPA Review of Draft Remedial Investigation Report for Installation Restoration Site 12, Old Bunker Area - Naval Station Treasure Island, San Francisco, California

Dear Mr. Sullivan:

The U.S. Environmental Protection Agency (U.S. EPA) appreciates the opportunity to review the Department of the Navy (Navy) document entitled "Draft Remedial Investigation Report for Installation Restoration Site 12, Old Bunker Area" for Naval Station Treasure Island, San Francisco, California, dated June 10, 2011. Please see the enclosure for EPA's comments.

Please do not hesitate to contact me at (415) 947-4184 should you have any questions concerning this matter.

Sincerely,

Melinda M. Dragone

Melinda M. Dragone
Remedial Project Manager

Cc (via email only):
Mr. David Clark, U.S. Department of the Navy, david.j.clark2@navy.mil
Mr. Anthony Konzen, U.S. Department of the Navy, anthony.konzen.ctr@navy.mil
Ms. Remedios Sunga, California Department of Toxic Substances Control, rsunga@dtsc.ca.gov
Mr. Ross Steenson, California Regional Water Quality Control Board, rsteenson@waterboards.ca.gov
Mr. Gary Foote, AMEC Geomatrix, Inc., gary.foote@amec.com
Mr. William Carson, Terraphase Engineering Inc., william.carson@terraphase.com

ENCLOSURE: **August 19, 2011**

U.S. EPA Review of Treasure Island - Draft Remedial Investigation (RI) Report for IR Site 12, Old Bunker Area

GENERAL COMMENT

1. Lead is recommended as a COC in soil for further evaluation in the Feasibility Study (FS) only for Areas of Interest (AOI) 1201/1203/1220; however, other soil areas have significantly elevated concentrations of lead but are not recommended for further evaluation. Although Exposure Point Concentrations (EPC) may not exceed the screening levels for lead, some elevated point concentrations (for example the lead soil concentration of 3,970 mg/kg within EU 6) may indicate localized soil contamination or hot-spots. Please clarify how lead hot-spots as well as other potential contaminant hot-spots were evaluated in the report.

SPECIFIC COMMENTS

1. **Executive Summary - Solid Waste Disposal Areas (SWDAs); Executive Summary – Nature and Extent of Contamination in Soil, Groundwater, and Soil Gas; Section 1.2.3.4 Solid Waste Disposal Areas (SWDA), page 1-9:** Please include a short summary describing the radiological contamination being addressed under the non-time-critical removal in the SWDAs or reference Section 1.3.13 Removal Action Activities. Although this information will be presented in a subsequent report, the SWDAs are located in Site 12 and should be included in the text of this RI.

2. **Section 1.3.16 Human Health Risk Evaluations in Soil and Residential Backyard Evaluation, Page 1-30:** It seems unclear what analysis was used to support the conclusion that soil samples from common areas of IR Site 12 are representative of the soil in backyards. Also, the justification that the comparison of the much larger area EPC (many times larger than a backyard) is appropriate for current residential backyard exposure is unclear. Please clarify.

3. **Table 1-2: Ambient Metals Concentrations in Soil:** The table references EPA 2004 Preliminary Remedial Goals (PRG); however, the 2004 PRG Table should no longer be used for contaminant screening of environmental media because it has been replaced with the more current Regional Screening Levels (RSL) Table which was last updated in June 2011.

4. **4.2.1 Soil Screening Levels - PAHs, Page 4-2:** Please clarify if BAP (EQ) screening concentration 0.62 mg/kg is a risk-based concentration and include in the text the cancer risk associated with a BAP (EQ) concentration of 0.62 mg/kg.

5. **4.2.1 Soil Screening Levels – Dioxins, furans, and dioxin-like PCBs, Page 4-3:** Please include in the text the cancer risk associated with a 2, 3, 7, 8-TCDD TEQ concentration of 12 ng/kg.

6. **4.2.2 Groundwater Screening Values, Page 4-4:** Please explain the rational for using the Alameda Point groundwater radium-226 background concentration as the Treasure Island project screening threshold?

7. **Section 5.3 Summary of Fate and Transport for Chemicals Exceeding Screening Criteria, page 5-20:** Please clarify the following text "no evidence that chromium present at IR Site 12 is in the hexavalent (+6) state". Please explain what evidence supports the assertion chromium is not present in hexavalent chromium at the site. Was the soil at IR Site 12 analyzed for hexavalent chromium?

8. **Section 6.3.1 Grouping Data for Soil, Page 6-5:** Please clarify whether the unpaved surface soil described in the current residential scenario includes the backyards. If the backyards are not included in the soil data then please note this in the text.

9. **Section 9.0 Summary, Conclusions, and Recommendations -Pesticides: Page 9-24:** In EU 7 and EU 12 only one soil sample each was analyzed for chlordane and both samples detected chlordane. The text states chlordane is not being included as a COC because the risk estimates for chlordane are based on single sample results and there is no indication that chlordane was used on Site 12. Please explain why further characterization and sampling of chlordane is not warranted for EU 7 and EU12. Also, the text appears to conclude the chlordane detections in soil were not a result of pesticide application; please present an alternative mechanism for the presence of chlordane in the soil.

10. **Section 9.6.2.3 Soil Gas - Chloroform, Page 9-26:** Chloroform was detected in soil gas exceeding the cancer risk point of departure. The lack of an apparent source is part of the rational for excluding chloroform as a COC in the FS. Although chloroform was not detected in the soil; the groundwater was not sampled for chloroform. Please revise the rational for excluding chloroform as a COC.

11. **Appendix C4.2 Data Reduction, Page 814:** Please explain the rational for excluding the duplicate samples in the HRRA and explain why the highest concentration of the two samples was not used in order to be more conservative.

12. **Appendix C4.2 Data Reduction, Page 817:**
Please add a short description explaining why the CTE was not included in the HHRA.